



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,288	06/15/2000	Erik P. Fiedorowicz	RSW9-2000-0041-US1	8794

7590 02/17/2004
Jeanine S Ray-Yarletts
IBM Corporation T81/062
Intellectual Property Law
PO Box 12195
Research Triangle Park, NC 27709

EXAMINER

HUYNH, CONG LAC T

ART UNIT	PAPER NUMBER
----------	--------------

2178

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/595,288

Applicant(s)

FIEDOROWICZ ET AL.

Examiner

Cong-Lac Huynh

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: the application filed 6/15/00.
2. Claims 1-45 are pending in the case. Claims 1, 16 and 31 are independent claims.

Specification

3. The specification is objected to because of some missing information. It is requested that Applicants:
 - provide the serial number of the co-pending application mentioned in the specification (page 21, lines 10-12)
 - update the status of the co-pending application 09/287,988 (page 15, lines 10-13)

Drawings

4. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the XSL template match 610 and the embedded child template 620 as described in the specification (page 23 and page 24). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claim 31 is objected to because of a minor error in the preamble: "A computer program product *in a computer readable medium* for generating a composite style sheet ... " (lines 1-3).

It is suggested to add the word "embodied" after the word "product" to the preamble as "A computer program product embodied in a computer readable medium for generating a composite style sheet..." to obtain a standard statement for a computer program product claim.

6. Claim 33 is objected to because of the following informality: the "22" within "the computer program product of claim 22 ..." is a typographical error. It should be "32."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 2-5, 9-10, 15, 17-20, 25, 30, 32-35, 40, 45 are rejected under 35

U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, which is dependent on claim 1, it is confusing which subset style sheets in the plurality of subset style sheets include the global style sheet, and which subset style sheets in the plurality of subset style sheets are inserted to the global style

sheet . Claim 1 states that “merging *the plurality of subset style sheets* into a composite style sheet” whereas claim 2 states that “*wherein* merging the plurality of style sheets includes *inserting other subset style sheets of the plurality of subset style sheets* into the global style sheet” where the global style sheet is included in the plurality of subset style sheets as recited “wherein the plurality of subset style sheets include a global style sheet” (claim 2).

Dependent claims 3-5, 10, 15 are rejected for fully incorporating the deficiencies of their base claim.

Claims 17-20, 25, 30 are for an apparatus for method claims 2-5, 10, 15, and are rejected under the same rationale.

Claims 32-35, 40, 45 are for a computer product for method claims 2-5, 10, 15, and are rejected under the same rationale.

Regarding claim 9, which is dependent on claim 1, it is redundant to perform the identifying and merging steps after determining if a composite style sheet is not present in the composite style sheet repository.

The identifying and merging steps are already performed in claim 1 to generate the composite style sheet for a document. If performing these same steps again when the generated composite style sheet is not present in the composite style sheet repository,

Art Unit: 2178

then the composite style sheet generated the second time would be the same as the composite style sheet generated the first time. Nothing different.

9. Claim 45 recites the limitation "wherein the global style sheet includes a prefix/postfix glue ..." in lines 1-3. There is insufficient antecedent basis for this limitation in the claim.

Claim 45, as recited, is dependent on claim 42, which is dependent on claim 31. Claim 45 refers to the global style sheet whereas independent claim 31 as well as claim 42 do not contain "the global style sheet." It is suggested to correct the claim 45's dependency where the claim is dependent on claim 32 (since claim 32 mentions the global style sheet).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

Art Unit: 2178

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 1-9, 11-14, 16-24, 26-29, 31-39, 41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helgeson et al. (US Pat No. 6,643,652 B2, 11/4/03, filed 1/12/01, priority 1/14/00).

Regarding independent claim 1, Helgeson discloses:

- merging the content, logic and style separated into different XML files using XSL transformation capabilities to generate XML document based on the web content (col 50, lines 43-67)

Helgeson does not explicitly disclose identifying a plurality of style sheets based on the content of the electronic document.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Helgeson to include identifying a plurality of style sheets based on the content of the electronic document for the following reason. It was obvious that a XML document includes a plurality of portions each has a different style sheet. The fact that the XSL transformation is used to merge the content, logic and style to generate a XML document based on the web content suggests that the style sheet for each portion in the web document content must be identified so that all of the

Art Unit: 2178

style sheets in the web content, represented by the style sheet's name or style sheet's identifier, are recognized to be merged for generating a XML document.

Regarding claim 2, which is dependent on claim 1, Helgeson discloses that the plurality of subset style sheets includes a global style sheet and merging the plurality of subset style sheets includes inserting other subset style sheets of the plurality of style sheets into the global style sheets (col 71 to col 72: the example shows the subset style sheets including the global style sheet of the document and how to combine the style sheets in the XML document).

Regarding claim 3, which is dependent on claim 2, Helgeson discloses that inserting the other subset style sheets of the plurality of subset style sheets into the global style sheet includes converting a root template in each of the other subset style sheets to a child template (col 73 to col 74: the fact that the taglibrary stylesheet contains a number of xml:import directives to import templates responsible for *implementing subsets of tags* and it also contains a number of default *templates* suggests converting a root template in each of the other subset style sheets to a child template since the subsets of tags suggests a hierarchical relationship between the sets of tags and the subsets of tags where each tag has a different style sheet and where each style sheet is implemented in a different template. The templates of the subsets of tags, which are equivalent to the child templates, therefore, must include all the upper level style sheets

Art Unit: 2178

of the upper level tags; col 79: the hierarchy elements in the XML document are transformed by the template style sheets).

Regarding claim 4, which is dependent on claim 3, Helgeson discloses inserting the other subset style sheets of the plurality of subset style sheets into the global style sheet further includes adjusting match phrases of embedded child templates and references in each of the other subset style sheets (the code examples in cols 71-74: the phrase matching is included in the process of inserting the subset style sheet to the global style sheet).

Regarding claim 5, which is dependent on claim 2, Helgeson discloses that the other subset style sheets are inserted following a root template of the global style sheet (col 71 to col 72: in the example, the other subset style sheets of the XML document in sections 3-6 are inserted following the root template of the global style sheet in section 2).

Regarding claim 6, which is dependent on claim 1, Helgeson discloses that identifying a plurality of subset style sheets includes parsing the electronic document into a document object model and examining first level child elements of the document object model (col 56, lines 49-50; col 57, lines 25-67).

Art Unit: 2178

Regarding claim 7, which is dependent on claim 6, Helgeson discloses that identifying a plurality of subset style sheets further includes matching values of the first level child elements to characteristic identifier of subset style sheets in a subset style sheet repository and selecting the plurality of subset style sheets from the subset style sheets in the subset style sheet repository based on whether the first child element values match characteristic identifiers for the subset style sheets (col 71 to col 74: the templates in *the code examples* include the matching values of the first level child elements to the identifiers of subset style sheets in the style sheet libraries and selecting the subset style sheets from the style sheet libraries based on the value matching).

Regarding claim 8, which is dependent on claim 1, Helgeson discloses storing the composite style sheet in a composite style sheet a composite style sheet repository (col 49, lines 40-64: the fact that the Style Sheet Control system allows the users to modify, add, and delete the mechanisms in the Style Sheet Control system suggests storing the composite style sheet to the style sheet system since adding a style sheet to said system means storing more style sheet to the style sheet system).

Regarding claim 9, which is dependent on claim 1, Helgeson discloses determining if a composite style sheet for the electronic document is present in a composite style sheet repository (col 74, lines 30-34). Helgeson does not explicitly disclose that if a composite

style sheet for the electronic document is not present in the composite style sheet repository, performing the identifying and merging steps.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Helgeson to include performing the identifying and merging steps if the composite style sheet is not present in the composite style sheet repository for the following reason since the identifying and merging steps can be repeated based on the subset style sheets stored in the style sheet database.

Regarding claim 11, which is dependent on claim 1, Helgeson discloses determining if a client device to which the electronic document is to be sent is capable of rendering the electronic document using the composite style sheet, and sending the electronic document to the client device with a reference to the composite style sheet (figure 8A and col 50, lines 47-52: the platform 808 can transform a web content into different forms in HTML, XML, WML formats to client devices such as PCs, laptops or handheld devices based on the characteristics of the client devices suggests determining the capability of rendering the web content at the client devices before sending the web content with a specific composite style sheet to the client device).

Regarding claim 12, which is dependent on claim 11, Helgeson discloses rendering the electronic document using the composite style sheet and sending the rendered electronic document to the client device, if the client device is not capable of rendering the electronic document using the composite style sheet (figure 8A and col 50, lines 47-

52: the platform 808 can transform a web content into different forms in HTML, XML, WML formats to client devices such as PCs, laptops or handheld devices based on the characteristics of the client devices *further suggests* sending the transformed web content to the client device despite the situation that whether or not the client device has the capability of rendering the electronic document using the composite style sheet; see figures 4 and 17).

Regarding claim 13, which is dependent on claim 12, Helgeson discloses the rendered electronic document is one of an HTML document and a WML document (col 50, lines 43-67; col 77, lines 20-43; figures 4 and 17).

Regarding claim 14, which is dependent on claim 1, Helgeson discloses identifying the plurality of subset style sheets based on characteristics of a client device to which the electronic document is to be sent (figures 4 and 17, figure 8A and col 50, lines 47-52; col 51, lines 31-37; col 135, lines 8-27).

Claims 16-24, 26-29 are for an apparatus of method claims 1-9, 11-14, and are rejected under the same rationale.

Claims 31-39, 41-44 are for a computer program product of method claims 1-9, 11-14, and are rejected under the same rationale.

Art Unit: 2178

13. Claims 10, 25, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helgeson as applied to claims 1, 16, and 31 above, and further in view of Renard et al. (US Pat No. 6,405,123 B1, 6/11/02, filed 5/17/00, priority 12/21/99).

Regarding claim 10, which is dependent on claim 2, Helgeson does not disclose that the global style sheet includes electronic document navigational information.

Renard discloses that the WML elements specify markup and structural information about a WML deck where elements may contain a start tag, content and an end tag and navigational information (col 8, lines 18-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Renard into Helgeson since Renard discloses the navigation information included in the tags of WML elements providing the advantage to apply the WML tags with the navigation information to the transformed XML tags containing the global style sheet as in Helgeson for faster browsing the web content in the wireless devices with such small screens.

Claims 25 and 40 are for an apparatus and a computer program product of method claim 10, and are rejected under the same rationale.

14. Claims 15, 30, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helgeson as applied to claims 1, 16, and 31 above, and further in view of W3C, XSL Transformations (XSLT) Version 1.0, 11/16/99, pages 1-123.

Art Unit: 2178

Regarding claim 15, which is dependent on claim 2, Helgeson does not disclose that the global style sheet includes a prefix/postfix glue that generates cards from the merged subset style sheets.

W3C discloses the global style sheet includes a prefix glue that generates the elements of the web content from the merged subset style sheets (pages 106, 108-019).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined W3C into Helgeson since W3C discloses using the prefix feature to generate the style sheet for an element of the web document, where elements of the web content which are displayable information, are equivalent to cards, providing the advantage to apply the prefix feature to the transformation of the web document into different formats according to the device characteristics for fast navigating data of the web document in the predefined order.

Claims 30 and 45 are for an apparatus and a computer program product of method claim 15, and are rejected under the same rationale.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hill et al. (US Pat No. 6,023,714, 2/8/00, filed 4/24/97) – Method and system for dynamically adapting the layout of a document to an output device.

Art Unit: 2178

Fletcher et al. (US Pat No. 6,138,156, 10/24/00, filed 10/5/98) – Selecting and applying content-reducing filters based on dynamic environmental factors.

Yalcinalp (US Pat No. 6,507,857 B1, 1/14/03, filed 3/10/00, priority 3/12/99) – Extending the capabilities of an XSL style sheet to include components for content transformation.

Sandhu et al. (US Pat No. 6,347,307 B1, 2/12/02, filed 6/13/00, priority 6/14/99) – System and method for conducting web-based financial transactions in capital markets.

Bridgman et al. (US Pat No. 6,523,062 B1, 2/18/03, filed 6/29/99) – Facilitating memory constrained client devices by employing deck reduction techniques.

Hind et al. (US Pat No. 6,585,778 B1, 7/1/03, filed 8/30/99) – Enforcing data policy using style sheet processing.

Chen et al. (US Pat No. 6,668,354 B1, 12/23/03, filed 1/5/99) – Automatic display script and style sheet generation.

Boag et al. (US Pat No. 6,589,291 B1, 7/8/03, filed 4/8/99) – Dynamically determining the most appropriate location for style sheet application.

Hind et al. (US Pat No. 6,463,440 B1, 10/8/02, filed 4/8/99) – Retrieval of style sheets from directories based upon partial characteristic matching.

Krebs et al. (US Pat No. 6,668,369, 12/23/03, filed 12/29/99) – Software debugging tool for displaying dynamically written software code.

Ferrel et al. (US Pat No. 6,230,173 B1, 5/8/01, filed 7/17/95) – Method for creating structured documents in a publishing system.

King (US Pat No. 6,532,446 B1, 3/11/03, filed 8/21/00, priority 11/24/99) – Server based speech recognition user interface for wireless devices.

Art Unit: 2178

Smethers (US Pat No. 6,560,640 B2, 5/6/03, filed 1/22/99) – Remote bookmarking for wireless client devices.

Dahm et al. (US Pat No. 6,597,903 B1, 7/22/03, filed 11/14/00, priority 11/2/98) – Online churn reduction and loyalty system.

Carliner, Elements of Editorial Style for Computer-Delivered Information, IEEE 1990, pages 38-45.

Spyglass, Inc., Spyglass Prism, 1997, pages 1-8.

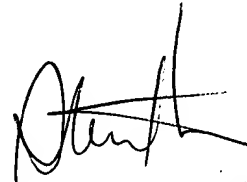
Ossenbruggen et al., Style Sheet Languages for Hypertext, ACM 10/1997, pages 1-7.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cong-Lac Huynh whose telephone number is 703-305-0432. The examiner can normally be reached on Mon-Fri (8:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 703-308-5186. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9000.

clh
2/5/04



STEPHEN S. HONG
PRIMARY EXAMINER